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Subject: Reconsideration of LRAM values associated with the Spanish Lake Restoration Mitigation Bank located in Ascension and Iberville Parishes, Louisiana.

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DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, organization symbol, Agency/Post)	Room Number - Building 286	
Karen Mahl, OD-OA X 2328 (Please call for pick-up)	Phone Number 504-862-2328	



# DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT 7400 LEAKE AVENUE NEW ORLEANS LOUISIANA 70118

Operations Division Regulatory Branch 29 Jan 17

Mr. Stephen R. Wallace Manager Spanish Lake Restoration, LLC 7478 Highland Road Baton Rouge, Louisiana 70808

Dear Mr. Wallace:

This responds to your letter dated November 17, 2016, concerning Spanish Lake Restoration Mitigation Bank located in in Ascension and Iberville Parishes, Louisiana. You specifically request reconsideration of the Louisiana Wetland Rapid Assessment Method (LRAM) values associated with the mitigation bank.

I have directed the staff of our Regulatory Branch to carefully evaluate the information you provided in consultation with the other Interagency Review Team (IRT) members. Once the IRT has had the opportunity to review and deliberate this material, we will inform you of our preliminary findings regarding the LRAM valuations. If the IRT requires additional clarification to complete its analysis, we will arrange a meeting with your company to discuss further.

Thank you for your kind words of welcoming. If you have any other questions regarding this matter, please contact Mr. Martin Mayer, Chief, Regulatory Branch, at (504) 862-2255 or by email at martin.s.mayer@usace.army.mil.

Sincerely,

Michael N. Clancy Colonel, U.S. Army

District Commander



JAN 2 9 2017

Operations Division Regulatory Branch

Mr. Stephen R. Wallace Manager Spanish Lake Restoration, LLC 7478 Highland Road Baton Rouge, Louisiana 70808

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Sincerely,

Michael N. Clancy Colonel, U.S. Army

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**District Commander** 

EXEC

Mayer



# Spanish Lake Restoration, LLC

Wetlands Bank and Ecological Resource 7478 Highland Road; Baton Rouge, Louisiana 70808

Phone: 225.928.5333

November 17, 2016

Colonel Michael Clancy
Commander & District Engineer
United States Army Corps of Engineers
New Orleans District
7400 Leake Ave
New Orleans, LA 70118

Re: Request for Consideration by Spanish Lake Restoration, LLC Mitigation Bank

Dear Colonel Clancy,

Congratulations upon your recent assignment as the New Orleans District's 63<sup>rd</sup> Commander and District Engineer. We are truly honored to have someone in command with your educational background and such a distinguished and decorated service record. Thank you for your continued service to your country. Spanish Lake Restoration, LLC (SLR) respectfully requests that you please place SLR's Mitigation Bank on your agenda and schedule a meeting within the NOD to discuss matters outlined below.

SLR is a 4,000+ acre Mitigation Bank located in Iberville & Ascension Parishes that was established in 1999 using the Wetland Valuation Assessment (WVA) methodology. More than 300 Individual and Nationwide §404/§10 Permits were issued under the WVA between 1999-2011 and later, the New Orleans District's Civil Works Division in 2014 and 2015 purchased a number of compensatory mitigation credits under the WVA from SLR for a levee and a diversion project.

Beginning in 2011, a series of new Mitigation Bank Assessment techniques began to be implemented that have had the effect of seriously devaluing SLR's credit ratios, starting with the Modified Charleston Method (MCM). In 2014, the New Ratio Method (NRM) was instituted in lieu of the MCM and then most recently in early 2016, the Final Interim Version of the Louisiana Wetland Rapid Assessment Method (LRAM) was put into effect. The NRM and LRAM have carried forward the MCM's decrease in SLR's credit values.

DPM man Mayer There are three issues pertaining to the revaluation of SLR's Mitigation Bank that we respectfully ask for your consideration: (1) SLR be given "Enhancement" status under the LRAM for "Preservation" acreage (32.24 acres in Unit I & 380.55 acres in Unit II) within the Spanish Lake Basin that was beneficially improved approximately 6 years ago, as permitted in SLR's MBI; (2) SLR Bank Units III & VI be designated under the LRAM "Site Management Factor" as "None", instead of "Passive", where Units I & II are already designated as "None"; and (3) SLR Bank Units I & II be recognized under the LRAM "Size Factor" as ">500 acres", instead of "<500 acres", where Unit I has 1,750 acres under Servitude and Unit II has 1,139 acres under Servitude. We have detailed each of these matters in the attached "Issues For Consideration" outline.

We have discussed these issues with U.S. EPA Region VI and we now, by this correspondence, respectfully request your consideration.

We thank you in advance.

Sincerely,

Stephen R. Wallace

Manager

Spanish Lake Restoration, LLC

L. PWella-

Cc: Mr. William H. Honker, P.E., Director—Water Division, EPA Region VI

Mr. Mark R. Wingate, Deputy District Engineer, New Orleans District

Mr. Murray P. Starkel

#### **Issues For NOD Consideration**

#### 1. LRAM "Mitigation Type Factor" Option: Preservation To Enhancement Status

→ SLR respectfully requests that it be given "Enhancement" status under the LRAM "Mitigation Type Factor" Option for remaining "Preservation" acreage (32.24 acres in Unit I & 380.55 acres in Unit II) within the Spanish Lake Basin that has benefitted from hydrological improvements implemented >6 years ago.

SLR's MBI provides that improvements to the hydrological regime in the Spanish Lake Basin would permit SLR to have its Preservation credits extended into Enhancement credits. The MBI says "This agreement may be amended to extend mitigation credits for additional enhancement associated with hydrologic improvement activities to areas where the sole basis of mitigation credit is currently Preservation." (p. 22) The MBI recognizes that off-site activities can either negatively alter or positively inure to the benefit of the Bank's value: "Mitigation potential may be adjusted by MBRT at any time should an Act of God or human-induced activity adversely affect the value or function..." and "If...programs are used offsite...and the programs' activities either directly or indirectly benefit the Bank, then the Sponsor will not forfeit credits." It's an outcome-determinative criterion.

Under the LRAM, "Enhancement" is the manipulation or modification of a wetland that heightens, intensifies or improves specific aquatic resource function(s) or is something done to change the growth stage or composition of the vegetation present, even though it may lead to a decline in other function(s). This is very similar to the definition of "Enhancement" set forth in 33 CFR §332.2: "The manipulation of the physical, chemical or biological characteristics of an aquatic resource to heighten, intensify or improve a specific aquatic resource function."

Activities undertaken by SLR to restore the natural hydraulic connectivity between Bayou Manchac and the 14,000+ acre Spanish Lake Basin (including its headwaters: Alligator Bayou, Bayou Paul & Bayou Braud) and related matters, included: (i) performing extensive historical, political, biological, topographical and hydrological research/follow-up required to open the offsite Alligator Bayou Flood-Gate, improperly used as a weir since the 1950's to artificially maintain high water levels throughout the entire Spanish Lake Basin; (ii) spear-heading a lawsuit and obtaining a final Court Order (upheld in 2014 by the La. 1st Circuit Court of Appeal) to stop and prevent the use of the Flood-Gate as a weir; (iii) after the Flood-Gate was opened and at the Corps' behest, obtaining a Preliminary JD for SLR's Bank on 1261.44 Bank acres in the Spanish Lake Basin to delineate jurisdictional wetlands (1159.66 acres) and non-wetland/waters of the U.S. (101.78 acres); (iv) identifying and removing 127 acres from SLR's Bank in the Spanish Lake Basin impacted by mineral activity: (v) transferring all credits sold from the removed acreage to non-impacted portions of SLR's Bank; and (vi) Signatory to the 2010 Spanish Lake/Alligator Bayou Flood-Gate Drainage Agreement.

Opening the Flood-Gate was equivalent to removing a low dam that had been in place for >50 years. This resulted in significant improvement to aquatic resource functioning not only within SLR's Bank, but also the entire larger Spanish Lake Basin. The hydrologic regime for surface soils with elevations between 1.5-6.0 feet NAVD was restored from a permanently flooded basis to a seasonally inundated regime. More than 50+ detrimental years of continuously extended hydro-periods within the Spanish Lake Basin were eliminated, normal historical water levels were reestablished and vital flood storage capacity was regained. This hydrologic restoration allowed for seasonal inundation/drying within the upper soil profile (reduction/oxidation) facilitating nutrient uptake that resulted in the regeneration of native hardwoods and bald cypress, which had been over-stressed and were not able to propagate in the continuously standing water. Habitat quality has of course, likewise, greatly increased in the process.

SLR has documented the hydrologically-enhancing benefits of this action through the attached 2000-2016 USGS Gage Data for Bayou Manchac (#07378746) and Alligator Bayou (#07378745), which establish that following the lowering of the Flood-Gate, the water levels in Spanish Lake Basin were now in sync with those of Bayou Manchac—i.e., the natural hydrological regime had been restored (*See* Exhibit A). Also shown therein is the resultant overall lowering of water levels within the Basin, as well as significantly decreased durational periods of flooding events. It is worth noting that even when the Gate is temporarily "up" during episodic Amite River backwater flooding events, hydrological flow within the Spanish Lake Basin is not significantly altered because the Basin cannot naturally drain until the water level in Bayou Manchac is lower.

The improved ecological condition of this aquatic resource is perceptually clear and the resultant functional and value output is self-evident. "New conditions", including the much improved hydrology, are established and present within the Spanish Lake Basin and warrant an upgrade of the remaining unsold Preservation acreage within SLR's Bank to Enhancement status.

#### 2. LRAM "Project Site Management Factor" Option: Passive to None

→ SLR respectfully requests that the LRAM "Project Site Management Factor" Option be changed from "Passive" to "None" in SLR Units III & IV, where SLR Units I & II are already properly designated as having "None" and use of the Flood-Gate did not create these wetlands nor does it maintain or sustain them.

Under LRAM, Project Site Management "refers to the level of maintenance or management that is required to maintain wetland hydrology on the project site." "Passive" Site Management is defined as "...structures that are required...to maintain hydrology from off-site." "None" (Project Site Management) means that "the site functions without dependence on structural management."

None of the subject wetlands "require" the passive use of the Flood-Gate as a control structure to artificially maintain some set water level in order for the Bank's wetlands to properly function or be sustained in any manner. SLR's wetland hydrology is not dependent upon the Gate's absence or presence nor is it "maintained" by "management" of the Flood-Gate. The Spanish Lake Basin wetland hydrology now functions in relative accord with the natural hydrologic regime of the Amite River/Bayou Manchac Watershed. Indeed, SLR's wetlands were in existence long before the Flood-Gate was improperly used as a weir, although these wetlands were impaired during that 50+ year period by the artificially elevated water levels that were then-maintained above the natural hydrological regime.

Additionally, SLR Bank Units I, II (in part), III & IV are in the Spanish Lake Basin behind the Flood-Gate. It's *inconsistent* to categorize Units III & VI as having "Passive" Project Site Management (which comes with a negative "-1 M-Value"), although Unit I and the pertinent portion of Unit II are both properly designated as having "No[ne]" Site Management (which comes with a neutral "0 M-Value").

Similarly, another reason supporting SLR's request that the "Passive" Project Site Management Factor not be ascribed to any of SLR's Units is the fact that an upstream, adjacent Bank (Bayou Manchac-Oakley) was designated as having "No[ne]" Site Management for the LRAM Project Site Management Factor. The Bayou Manchac-Oakley site is hydrologically connected to SLR within the Spanish Lake Basin and, likewise, is located behind the Flood-Gate.

#### 3. LRAM "Size Factor" Option: >500 acres

→ SLR respectfully requests that the LRAM "Size Factor" Option in SLR Units I & II be changed from "<500 Acres" (which comes with a 0.0 M-Value) to ">500 Acres" (which comes with a 0.5 M-Value), where SLR's Unit I has 1,750 Acres under servitude and Unit II has 1,139 Acres under servitude.

LRAM defines the "Size Factor" as follows: "The measure of the total size of the mitigation project that will be placed under protection of a conservation servitude." Total size is the key factor because "larger tracts are less common, have a greater potential for habitat diversity, provide a greater degree of isolation and thereby offer higher quality habitat than smaller tracts."

The "total size" of SLR's Mitigation Bank is 4,000+ acres of protected wetlands under a conservation servitude, which consists of several >500+ acre contiguous tracts. All of SLR's wetlands remain isolated within the greater 24,000+ combined acre Manchac/Spanish Lake Basin. SLR's MBI is replete with references to this 4000+ acre Bank as having a "high value as wetland and wildlife habitat" precisely because of the large amount of isolated acreage under servitude. SLR is not being given the proper "larger tract" value its wetland acreage is due.

#### SLR's Remaining Available Mitigation Acreage (Units I, II, III & VI):

<u>Unit I</u>: 1,750 acres under servitude and currently has **32.24** acres remaining, within the Spanish Lake Basin (Alligator Bayou drainage area).

LRAM Factor	Option	NOD's M-Value	SLR's M-Value
Mitigation Type	Preservation	0.4	
	Enhancement		3
Management	None	0	0
Negative Influences	Low	0	0
Size	500 : 100 acres	0	
	>500 acres		0.5
Buffer/Upland	None	0	0
Sum	- 1	0.4	3.5
LRAM Credits:		12.90	112.84

<u>Unit II</u>: 1,139 acres under servitude and currently has **1087.89** acres available, of which (a) **380.55** acres are within the Spanish Lake Basin and (b) **707.34** are within the Bluff Swamp Basin (Frog Bayou Drainage area). Therefore, SLR proposes separate LRAM Values for each "Sub-Unit."

#### → Sub-Unit (a)---Within Spanish Lake Basin (380.55-ACRES)

LRAM Factor	Option	NOD's M-Value	SLR's M-Value
Mitigation Type	Preservation	0.4	
	Enhancement		3
Management	None	0	0
Negative Influences	Low	0	0
Size	500 : 100 acres	0	
	>500 acres		0.5
Buffer/Upland	None	0	
Sum	E	0.4	3.5
LRAM Credits:		152.22	1,331.93

#### → Sub-Unit (b)---Within Bluff Swamp Basin (707.34 ACRES)

Factor	Option	NOD's M-Value	SLR's M-Value
Mitigation Type	Preservation	0.4	0.4
Management	None	0	0
Negative Influences	Low	0	0
Size	500 : 100 acres	0	
	>500 acres		0.5
Buffer/Upland	None	0	
Sum	-	0.4	0.9
LRAM Credits:		282.94	636.61

<sup>→</sup> This portion of Unit II will likely experience a similar hydrologic improvement in the near future. SLR requests Enhancement Value is likewise given to that acreage when it occurs.

Unit III: 612 acres under servitude and currently has 149.45 acres available, within the Spanish Lake Basin.

Factor	Option	NOD's M-Value	SLR's M-Value
Mitigation Type	Enhancement	3	3
Management	Passive	-1	
	None		0
Negative Influences	Low	0	0
Size	>500 acres	.5	.5
Buffer/Upland	None	0	0
Sum	-	2.5	3.5
LRAM Credits:		373.63	523.1

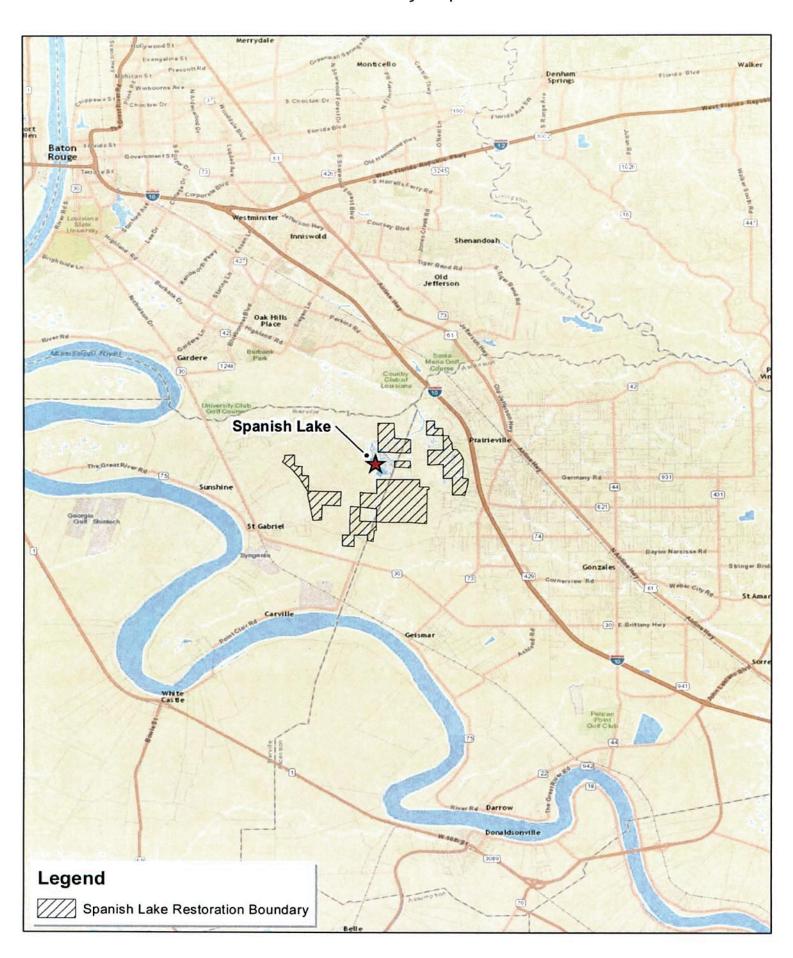
<u>Unit VI</u>: Contiguous with and in-between 612 acres of Unit III and approximately 670 acres of Unit I, Unit VI currently has **150.4** acres available, within the Spanish Lake Basin.

Factor	Option	NOD's M-Value	SLR's M-Value
Mitigation Type	Enhancement	3	3
Management	Passive	-1	
	None		0
Negative Influences	Low	0	0
Size	>500 acres	.5	.5
Buffer/Upland	None	0	0
Sum	-	2.5	3.5
LRAM Credits:		376	526.4

Jan-2016 Restored natural flooding and draining during and after rainfall events Jan-2015 Jan-2014 Floodgate opened (2009 - Present) Jan-2013 Jan-2012 Mandated closing of floodgate from excessive backwater from for short periods to protect Jan-2011 ---- 07378745 Alligator Bayou Bayou Manchac Jan-2010 Jan-2009 Iberville Parish Opens Floodgate .07378746 Bayou Manchac at Alligator B. Jan-2008 Jan-2007 Jan-2006 Floodgate closed (1950 - 2009) Elevated Water Level within SLR Jan-2005 Jan-2004 Jan-2003 1-2002

Water Levels from USGS Stations

## Spanish Lake and Spanish Lake Restoration Vicinity Map



### Effects of the Alligator Bayou Floodgate Opening on Spanish Lake

Before Floodgate Opened 1950 - 2010 Permanently Flooded

Permanently Flooded old growth cypress swamp (no regeneration)

Permanently Flooded Cypress Flats (no regeneration)

Permanently Flooded shallow Spanish Lake hydrilla dominance

> After Floodgate Opened November 2011 - Seasonally Inundated

Seasonally Flooded cypress swamp facilitating seedling growth

Seasonally Flooded
Spanish Lake
increased plant/
habitat diversity



Seasonally Flooded Cypress Flats currently regenerating

## Effects of the Alligator Bayou Floodgate Opening on Spanish Lake

After Floodgate Opened August 2015 Seasonally Inundated (Summer - Dry Period)

Seasonally Flooded cypress swamp facilitating seedling growth

Seasonally Flooded Spanish Lake increased plant/ habitat diversity



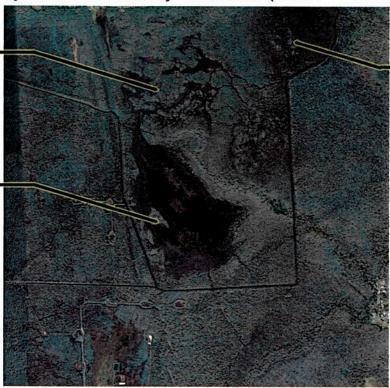
Seasonally Flooded Cypress Flats currently regenerating

After Floodgate Opened

January 2016 - Seasonally Inundated (Winter - Wet Period)

Seasonally Flooded cypress swamp facilitating seedling growth

Seasonally Flooded Spanish Lake increased plant/ habitat diversity



Seasonally Flooded Cypress Flats currently regenerating

# Effects of the Alligator Bayou Floodgate Opening on Spanish Lake





